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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,105	11/20/2003	Hirokazu Yamamoto	KM-US030558	1104
22919 7590 02/23/2007 GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER HA, NGUYEN Q	
			ART UNIT	PAPER NUMBER
			2854	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/707,105

Applicant(s)

YAMAMOTO ET AL.

Examiner

"Wynn" Q. HA

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/17/2003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because Fig. 5 is not labeled "PRIOR ART."  
Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 13** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claim is drawn to a computer program per se. A computer program per se is abstract instructions. Therefore, a computer program is neither a physical thing (product) nor a process as they are not "acts" being performed. As such, these claims are not directed to one of the statutory categories of invention (See MPEP 2106.01), but are directed to nonstatutory functional descriptive material.

It is noted that computer programs embodied on a computer readable medium or other structure, which would permit the functionality of the program to be realized, would be directed to a product and be within a statutory category of invention, so long as the computer readable medium is not disclosed as nonstatutory subject matter per se (e.g. signals or carrier waves).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-5, 7-11 and 13** are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's disclosed prior art.

Referring Applicant's disclosure, Fig. 5 and paragraphs [0003] through [0008], the prior art teaches the followings:

Claims 1 & 13: An abnormality management device connected via a network (paragraph [0006]) to an image forming device that includes a plurality of selectively used paper supply units or paper discharge units (paragraph [0004]), the abnormality management device managing abnormalities in the image forming device and comprising:

a display unit 200 (fig. 5) that displays an image of an image forming device 201 in which the plurality of the paper supply units or paper discharge units can be visually distinguished from each other;

an abnormality detection unit that detects abnormalities in the paper supply units or the paper discharge units based upon equipment data acquired from the image forming device (paragraph [0005]); and

an abnormality display unit 200 that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device (Fig. 5 shows an empty amount of A4-size papers located in Cassette 1, which is highlighted in the image display portion 201).

an abnormality management program (paragraph [0007]) that is executed in a computer connected via a network to an image forming device to perform all of the abnormality management functions listed above.

Claim 2: A default paper supply unit determining unit that determines whether one paper supply unit from amongst the plurality of the paper display units has been selected as a default (paragraph [0008]); and

a default display unit 202 that displays with emphasis the position of the paper supply unit selected as a default on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected (Fig. 5 shows Cassette 1, which is highlighted differently in the image display portion 201, is selected as a default. The different representation also comes from the highlighted circle next to the letters "Cassette 1").

Claim 3: An out of paper determining unit that determines based upon equipment data acquired from the image forming device whether any of the plurality of paper supply units have run out of paper (paragraph [0008]); and

an out of paper display unit 205 that displays with emphasis the position of a paper supply unit that has run out of paper on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected (Fig. 5 shows Cassettes 1 and 3 are out of paper. Fig. 5 also shows the positions of "Cassettes 1" and "Cassette 3" below the "Bypass" and "Cassette 2." The different presentation comes from the word

“EMPTY” itself, as well as the differently highlighted backgrounds of the paper remaining display portion 205).

Claim 4: A paper size display unit 203 that displays based upon equipment data acquired from the image forming device the size of paper stored in each paper supply unit (paragraph [0008]);

wherein the abnormality display unit 203 displays an abnormality by means of a symbol or an image in a paper size display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit (Fig. 5 shows Cassette 3 containing “NA” paper size; the letters “NA” being **a symbol or an image** indicating abnormality; and “Cassette 3” located below “Cassette 2”).

Claim 5: A paper remaining display unit 205 that displays based upon equipment data acquired from the image forming device the amount of paper remaining in each paper supply unit (paragraph [0008]);

wherein the abnormality display 205 unit displays an abnormality by means of a symbol or an image in a paper remaining display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit (Fig. 5 shows Cassette 3 containing an “EMPTY” amount of papers; the letters “NA” being **a symbol or an image** indicating abnormality; and “Cassette 3” located below “Cassette 2”).

Claims 7- 12: An abnormality management system (for an image forming device) comprising all that is claimed, as discussed in claims 1-5.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 6 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosed prior art in view of Kurtz (US 6,754,452 B2).

The prior art, as discussed in claims 1 above, teaches all that is claimed except for a sound abnormality generating unit that generates a sound when an abnormality is detected in a paper supply unit or a paper discharge unit by the abnormality detection unit.

Kurtz teaches an abnormality management device (or system) connected to image forming machines; wherein the management device has an audible signal generator that produces audible signals (sounds) custom mapped to individual image forming machine anomaly (See abstract; col. 2 lines 4-55). The audible signals may be mapped to the machines anomalies (regardless whether or not the abnormality is detected in a paper supply unit or a paper discharge unit) by a control panel located on the machine, through a network connection, or via a direct connection to a computer



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(col. 2 lines 62-65), in order to alert a person in charge of tending to the machines that an anomaly has occurred (col. 1 lines 39-41).

It would have been obvious to one having ordinary skill in the art to provide the abnormality management device of claim 1 (or system of claim 7) with a sound abnormality generating unit that generates a sound when an abnormality is detected in a paper supply unit or a paper discharge unit by the abnormality detection unit, in order to alert a person in charge of tending to the machines that an anomaly has occurred, as taught by Kurtz.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to "Wynn" Q. HA whose telephone number is 571-272-2863. The examiner can normally be reached on Monday - Friday, from 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NQH

  
**JUDY NGUYEN**  
**SUPERVISORY PATENT EXAMINER**